

Changing the angle

Group 1

$$\begin{array}{rcl}
 120^\circ = & 1.6 & \cancel{.65} & 1.37 \\
 140^\circ = & 1.25 & \cancel{1.07} & 1.24 \\
 160^\circ = & 1.16 & \cancel{1.12} & 1.39 \\
 180^\circ = & 1.41 & \cancel{1.34} & 1.24 \\
 \cancel{200^\circ} = & .97 & \cancel{.87} & 1.19
 \end{array}$$

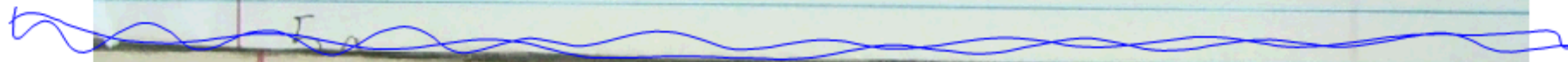
Group 2

<u>160</u>	150	130	<u>170</u>	<u>140</u>
1.72	1.85		2.41	1.66
2.19	1.41		2.85	1.72
2.09	1.81		2.25	1.50
2.75	1.91		2.53	1.92
2.03	1.03		2.41	1.57
2.12	1.58		2.19	1.54

Charging Weights

Group 1

50g	20g	100g	5g
- 1.10 seconds	- 1.35	- 1.37	- 1.5
- 1.26	- 1.11	- 1.33	- 1.8
- 1.32	- 1.45	- 1.37	- 1.4
- 1.28	- 1.19	- 1.50	- 1.6
- 1.31	- 1.60	- 1.36	- 1.5



Group 2

weight	time 1	time 2	time 3
100g	1.1 sec	1.25 sec	1.13 sec
50g	1.25 sec	1.25 sec	1.25 sec
20g	1.34 sec	1.25 sec	1.31 sec
10g	1.32 sec	1.19 sec	1.06 sec
5g	1.15 sec	1.1 sec	1.19 sec

Change length

Group 1

100cm	2.63	2.34	2.44
10cm	.50	.69	.40

Group 2

Wrap #		Time (sec)	
cm	wrap		
4	1	1:28	> -18
8	2	1:10	> -3
12	3	1:07	> -20
16	4	1:87	> -9
20	5	1:78	> -6
24	6	1:72	

A magician said to a volunteer from the audience, "Pick a number, but don't tell me what it is. Add 15 to it. Multiply your answer by 3. Subtract 9. Divide by 3. Subtract 8. Now tell me your answer."

"Thirty-two," replied the volunteer.

Then the magician *immediately* guessed the number that the volunteer had originally chosen.

1. What was the volunteer's number?

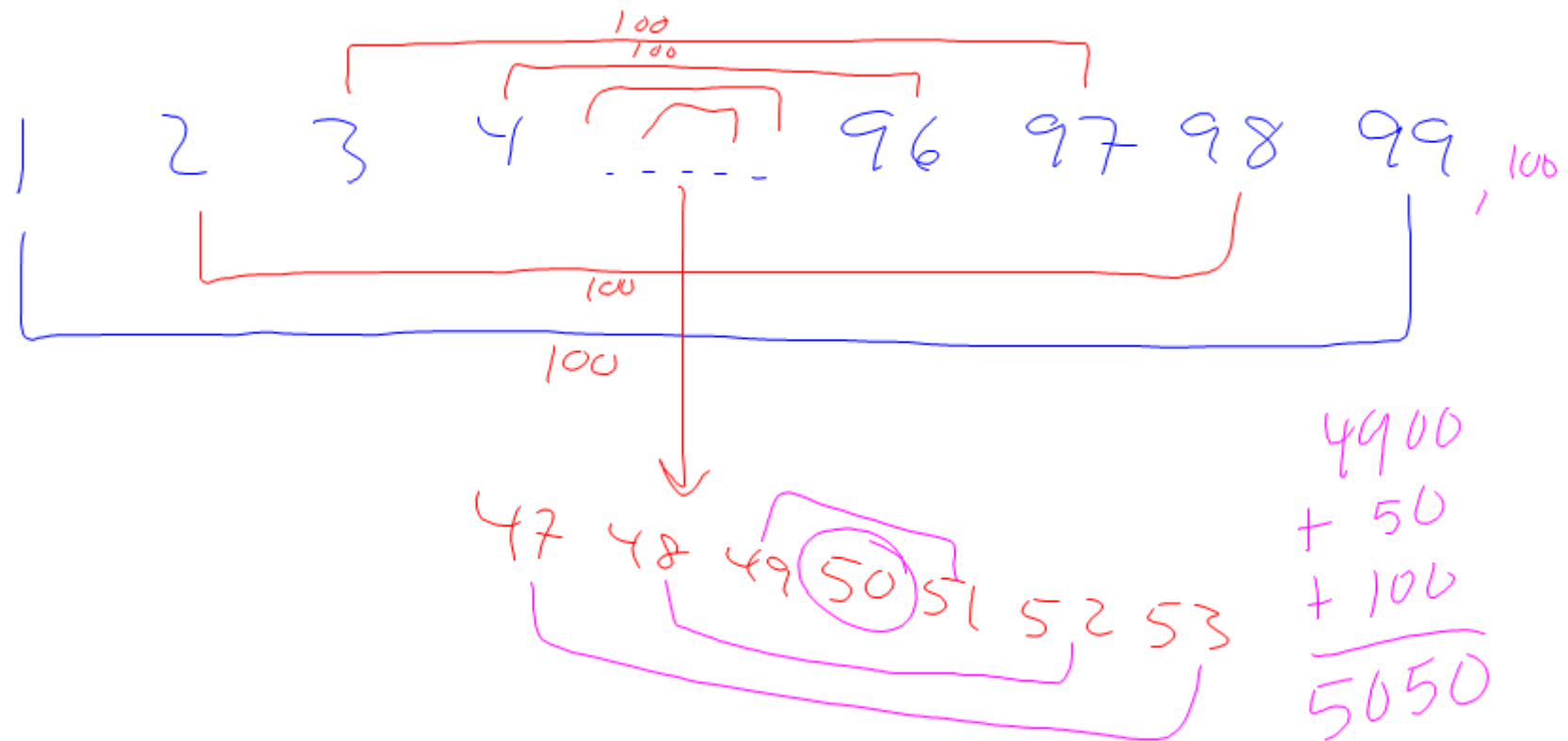
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2. How did the magician know so quickly? (The magician couldn't possibly have worked backwards that fast.)

just subtracted 4

Gauss

Add up numbers 1-100



Rope 22 total

147	148	143
144	146	146
145	146	146
146	145	145
145	145	145
145	148	145
144	146	144
146	145	

Pulse 22 total

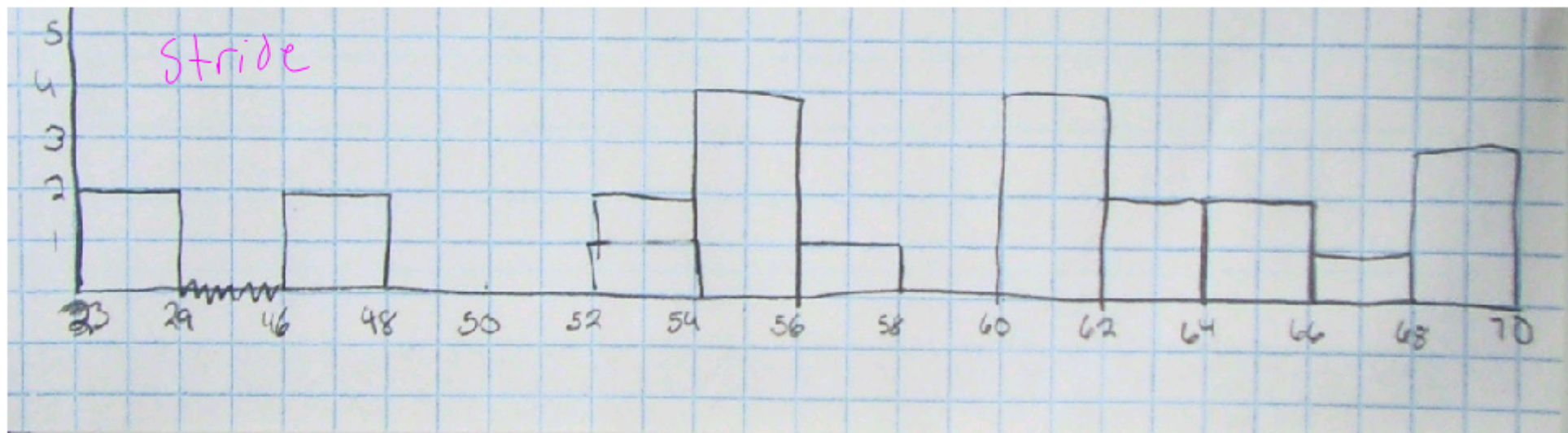
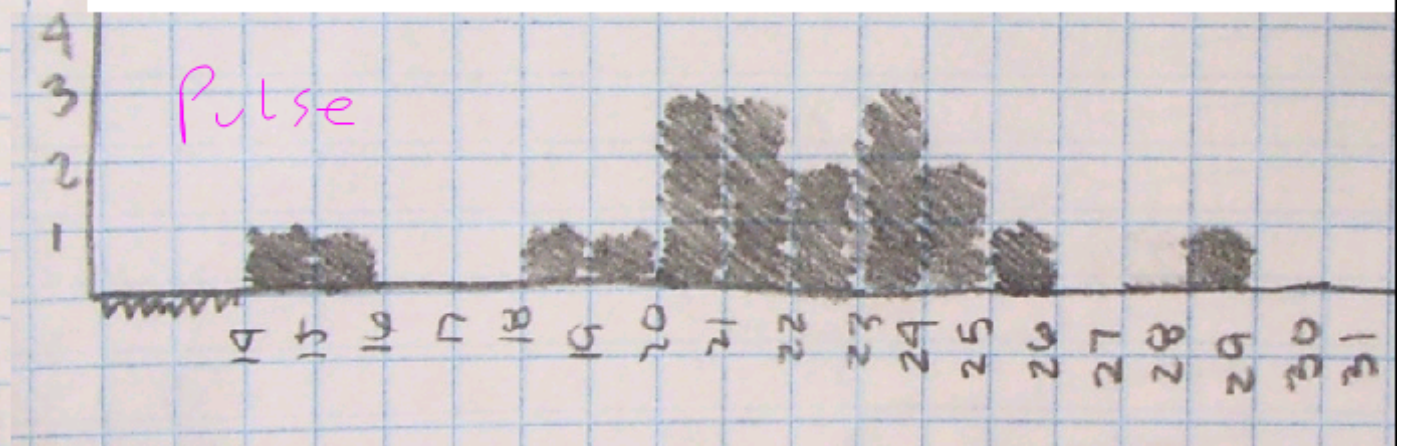
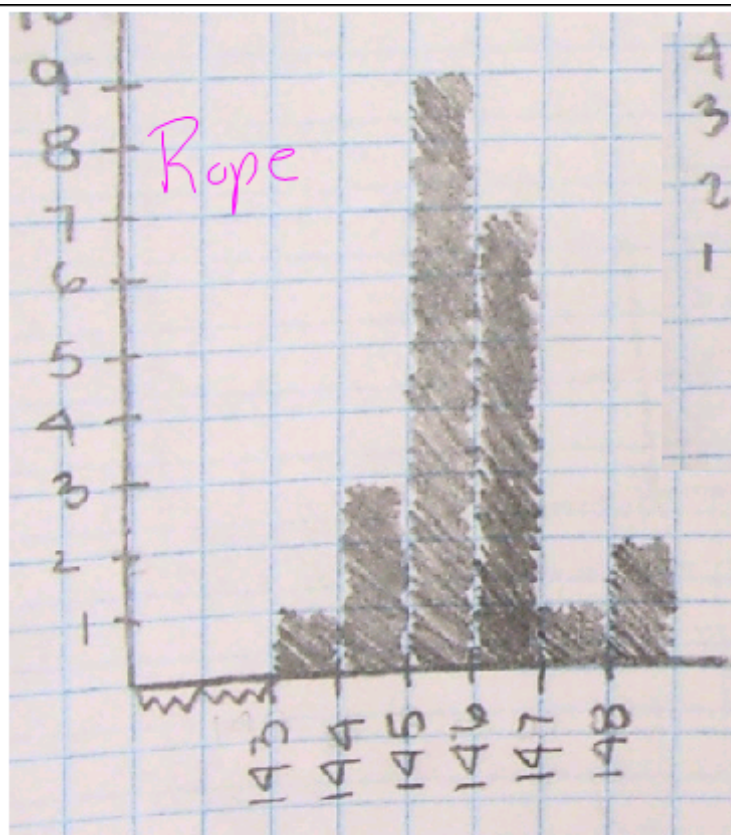
18	28	25
22	20	22
21	14	20
23	35	18
23	21	15
24	21	19
20	24	18
23		

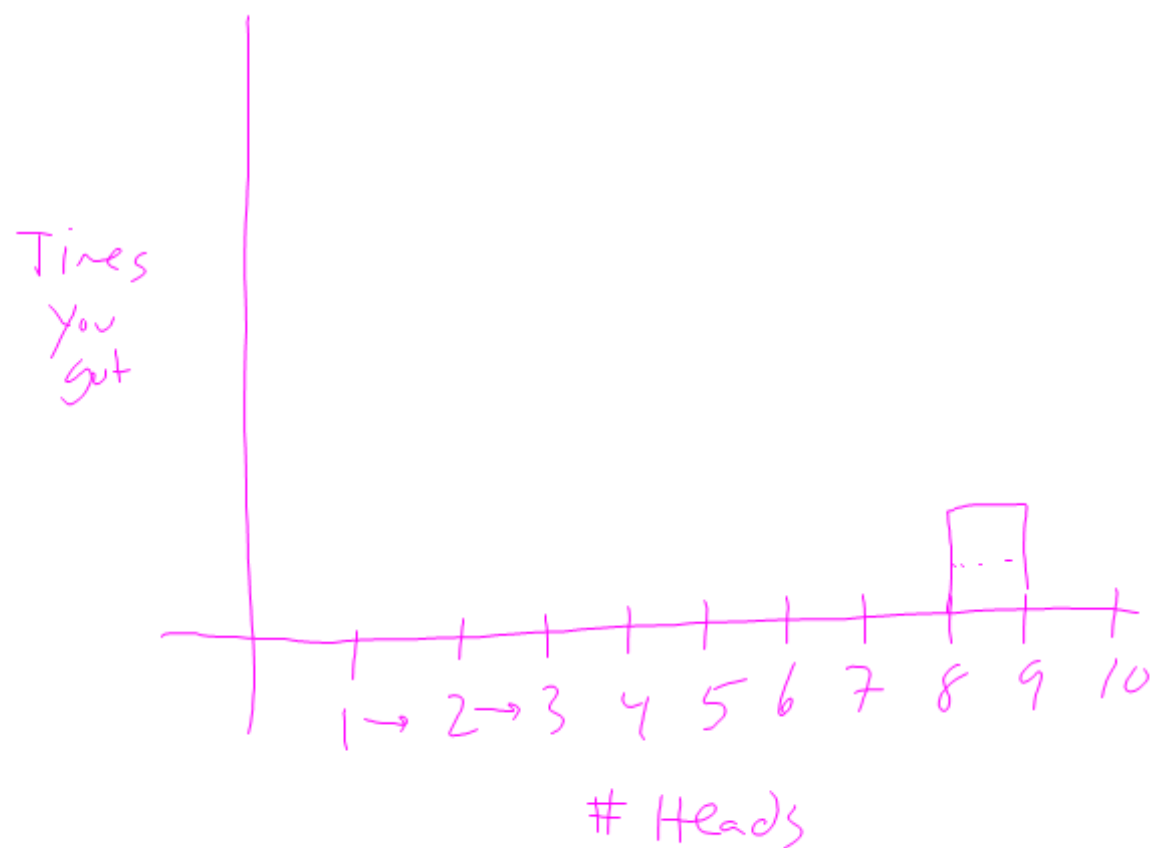
Stride 23 total

61	54	57	68	56	70
69	66	46	61	55	64
66	46	29	86	55	62
53	56	23	62	63	

Timing 5 sec 15 total

4.9	4.8	4.9	4.9
4.9	4.8	4.9	5.1
4.9	4.9	4.9	4.8
4.9	4.9	4.9	





Turn in

① Your data and graphs from last class

② Today's work

HW

#3-5 on HW 8
p. 327